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## WHAT IS CLAIMED IS:

1. A glycopeptide compound having at least one substituent of the formula:

$$-R^{a}-Y-R^{b}-(Z)_{x}$$

5 wherein

each R<sup>a</sup> is independently selected from the group consisting of alkylene, substituted alkylene, alkenylene, substituted alkynylene and substituted alkynylene;

bond, alkylene, substituted alkylene, alkenylene, substituted alkenylene, alkynylene and substituted alkynylene, provided R<sup>b</sup> is not a covalent bond when Z is hydrogen;

each Y is independently selected from the group consisting of oxygen, sulfur, -S-S-,  $-NR^c-$ , -S(O)-,  $-SO_2-$ ,  $-NR^cC(O)-$ , -OC(O)-,  $-NR^cSO_2-$ ,  $-OSO_2-$ ,  $-C(O)NR^c-$ , -C(O)O-,  $-SO_2NR^c-$ ,  $-SO_2O-$ ,  $-P(O)(OR^c)O-$ ,  $-P(O)(OR^c)NR^c-$ ,  $-OP(O)(OR^c)NR^c-$ , -OC(O)O-,  $-NR^cC(O)O-$ ,  $-NR^cC(O)NR^c-$ ,  $-OC(O)NR^c-$  and  $-NR^cSO_2NR^c-$ ; each Z is independently selected from hydrogen, aryl, cycloalkyl,

cycloalkenyl, heteroaryl and heterocyclic; each R<sup>c</sup> is independently selected from the group consisting of hydrogen,

each R<sup>c</sup> is independently selected from the group consisting of hydrogen, alkyl, substituted alkyl, alkenyl, substituted alkynyl, substituted alkynyl, cycloalkyl, substituted cycloalkyl, cycloalkenyl, substituted cycloalkenyl, aryl, heteroaryl, heterocyclic and -C(O)R<sup>d</sup>;

each R<sup>d</sup> is independently selected from the group consisting of alkyl, substituted alkyl, alkenyl, substituted alkynyl, substituted alkynyl,

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cycloalkyl, substituted cycloalkyl, cycloalkenyl, substituted cycloalkenyl, aryl, heteroaryl and heterocyclic;

x is 1 or 2;

and pharmaceutically acceptable salts thereof;

5 provided that:

- (i) when Y is -NR<sup>c</sup>-, R<sup>c</sup> is alkyl of 1 to 4 carbon atoms, Z is hydrogen and R<sup>b</sup> is alkylene, then R<sup>b</sup> contains at least 5 carbon atoms;
- (ii) when Y is -C(O)NR<sup>c</sup>-, Z is hydrogen and R<sup>b</sup> is alkylene, then R<sup>b</sup> contains at least 5 carbon atoms;
- (iii) when Y is sulfur, Z is hydrogen and R<sup>b</sup> is alkylene, then R<sup>b</sup> contains at least 7 carbon atoms; and
- (iv) when Y is oxygen, Z is hydrogen and R<sup>b</sup> is alkylene, then R<sup>b</sup> contains at least 11 carbon atoms.
- 2. The compound of Claim 1, wherein the glycopeptide compound is substituted with from 1 to 3 substituents of the formula  $-R^a-Y-R^b-(Z)_x$ .
  - 3. The compound of Claim 2, wherein each Ra is independently selected from alkylene having from 1 to 10 carbon atoms.
    - 4. The compound of Claim 3, wherein Ra is ethylene or propylene.
- 5. The compound of Claim 2, wherein Z is hydrogen and R<sup>b</sup> is alkylene of from 8 to 12 carbon atoms.
  - 6. The compound of Claim 5, wherein  $R^b$  and Z form an n-octyl, n-nonyl, n-decyl, n-undecyl or n-dodecyl group.

- 7. The compound of Claim 2, wherein Z is aryl, cycloalkyl, cycloalkenyl, heteroaryl or heterocyclic and R<sup>b</sup> is a covalent bond or alkylene of from 1 to 10 carbon atoms.
- 8. The compound of Claim 7, wherein Z is aryl and  $R^b$  is a covalent bond, methylene,  $-(CH_2)_6$ ,  $-(CH_2)_7$ ,  $-(CH_2)_8$ ,  $-(CH_2)_9$  or  $-(CH_2)_{10}$ .
  - 9. The compound of Claim 2, wherein each Y is independently selected from the group consisting of oxygen, sulfur, -S-S-, -NR<sup>c</sup>-, -S(O)-, -SO<sub>2</sub>-, -NR<sup>c</sup>C(O)-, -OC(O)-, -NR<sup>c</sup>SO<sub>2</sub>-, -C(O)NR<sup>c</sup>-, -C(O)O- and -SO<sub>2</sub>NR<sup>c</sup>-.
- 10. The compound of Claim 9, wherein Y is oxygen, sulfur, -NR<sup>c</sup>- or -NR<sup>c</sup>SO<sub>2</sub>-.
  - 11. The compound of Claim 2, wherein each Z is independently selected from hydrogen, aryl, cycloalkyl, heteroaryl and heterocyclic.
    - 12. The compound of Claim 11, wherein Z is hydrogen or aryl.
- 13. The compound of Claim 12, wherein Z is phenyl, substituted phenyl, biphenyl, substituted biphenyl or terphenyl.
  - 14. The compound of Claim 2, wherein the  $-R^a-Y-R^b-(Z)_x$  group is selected from the group consisting of:

$$-CH2CH2-NH-(CH2)9CH3;$$

$$-CH_2CH_2CH_2-NH-(CH_2)_8CH_3;$$

$$-CH_2CH_2-NHSO_2-(CH_2)_9CH_3;$$

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-CH_2CH_2-NHSO_2-(CH_2)_{11}CH_3;
                   -CH_2CH_2-S-(CH_2)_8CH_3
                   -CH_2CH_2-S-(CH_2)_9CH_3
                   -CH_2CH_2-S-(CH_2)_{10}CH_2;
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                   -CH_2CH_2CH_2-S-(CH_2)_8CH_3;
                   -CH_2CH_2CH_2-S-(CH_2)_9CH<sub>3</sub>;
                   -CH_2CH_2CH_2-S-(CH_2)_3 CH=CH-(CH_2)_4CH_3 (trans);
                   -CH_2CH_2CH_2CH_2-S-(CH_2)_7CH_3;
                   -CH_2CH_2-S(O)-(CH_2)_9CH_2;
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                   -CH_2CH_2-S-(CH_2)_6Ph;
                   -CH_2CH_2-S-(CH_2)_8Ph_2
                   -CH<sub>2</sub>CH<sub>2</sub>-S-(CH<sub>2</sub>)<sub>8</sub>Ph
                   -CH<sub>2</sub>CH<sub>2</sub>-NH-CH<sub>2</sub>/4-(4
                                                    -Cl/Ph)-Ph;
                   -CH<sub>2</sub>CH<sub>2</sub>-NH-CH<sub>2</sub>-4-[ACH<sub>3</sub>)<sub>2</sub>CHCH<sub>2</sub>-]-Ph;
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                   -CH<sub>2</sub>CH<sub>2</sub>-NH-CH<sub>2</sub>4-(4-CF<sub>3</sub>-Ph)-Ph;
                   -CH_2CH_2-S-CH_2-4-(4/CI-Ph)-Ph;
                   -CH_2CH_2-S(O)-CH_2-4-(4-C1-Ph)-Ph;
                   -CH<sub>2</sub>CH<sub>2</sub>CH<sub>2</sub>-S-CH<sub>2</sub>-4-(4-Cl-Ph)-Ph;
                   -CH_2CH_2-S(O)-CH_2+4-(4-C1-Ph)-Ph;
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                   -CH_2CH_2CH_2-S-CH_2-4-[3,4-di-Cl-PhCH_2O-)-Ph;
                   -CH_2CH_2-NHSO_2-CH_2-4-[4-(4-Ph)-Ph]-Ph;
                   -CH<sub>2</sub>CH<sub>2</sub>-NHSO<sub>2</sub>-CH<sub>2</sub>-4-(4-Cl-Ph)-Ph;
                   -CH_2CH_2CH_2-NHSO_2-CH_2-4-(Ph-C=C-)-Ph;
                   -CH<sub>2</sub>CH<sub>2</sub>CH<sub>2</sub>-NHSO<sub>2</sub>-4-(4-Cl-Ph)-Ph; and
                   -CH<sub>2</sub>CH<sub>2</sub>CH<sub>2</sub>-NHSO<sub>2</sub>-4-(naphth-2-yl)-Ph.
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15. A compound of formula I:

$$R^2$$
  $O$   $X^1$   $O$   $X^2$   $R^{13}$   $R^{11}$   $R^{12}$   $R^{14}$   $R^{15}$   $R^$ 

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 $R^1$  is selected from the group consisting of hydrogen, alkyl, substituted alkyl, alkenyl, substituted alkynyl, substituted alkynyl, substituted alkynyl, cycloalkyl, substituted cycloalkenyl, aryl, heteroaryl, heterocyclic and  $-R^a-Y-R^b-(Z)_x$  or a saccharide group optionally substituted with  $-R^a-Y-R^b-(Z)_x$ ;

 $R^2$  is hydrogen or a saccharide group optionally substituted with  $-R^a-Y-R^b-(Z)_x$ ;

 $R^3$  is  $-OR^c$ ,  $-NR^cR^c$ ,  $-O-R^a-Y-R^b-(Z)_x$ ,  $-NR^c-R^a-Y-R^b-(Z)_x$ ,  $-NR^cR^e$ , or  $-O-R^e$ ;

 $R^4$  is selected from the group consisting of hydrogen, alkyl, substituted alkyl, alkenyl, substituted alkynyl, substituted alkynyl,  $-R^a-Y-R^b-(Z)_x$ ,  $-C(O)R^d$  and a saccharide group optionally substituted with  $-R^a-Y-R^b-(Z)_x$ ;

R<sup>5</sup> is selected from the group consisting of hydrogen, halo,  $-CH(R^c)-NR^cR^c, -CH(R^c)-NR^cR^e \text{ and } -CH(R^c)-NR^c-R^a-Y-R^b-(Z)_x;$ 

 $R^6$  is selected from the group consisting of hydrogen, alkyl, substituted alkyl, alkenyl, substituted alkynyl, substituted alkynyl,  $-R^a-Y-R^b-(Z)_x$ ,  $-C(O)R^d$  and a saccharide group optionally substituted with  $-NR^c-R^a-Y-R^b-(Z)_x$ , or  $R^5$  and  $R^6$  can be joined, together with the atoms to which they are attached, form a heterocyclic ring optionally substituted with  $-NR^c-R^a-Y-R^b-(Z)_x$ ;

 $R^7$  is selected from the group consisting of hydrogen, alkyl, substituted alkyl, alkenyl, substituted alkynyl, substituted alkynyl,  $-R^a-Y-R^b-(Z)_x$ , and  $-C(O)R^d$ ;

R<sup>8</sup> is selected from the group consisting of hydrogen, alkyl, substituted alkyl, alkenyl, substituted alkynyl, substituted alkynyl, cycloalkyl, substituted cycloalkyl, cycloalkenyl, substituted cycloalkenyl, aryl, heteroaryl and heterocyclic;

R<sup>9</sup> is selected from the group consisting of hydrogen, alkyl, substituted alkyl, alkenyl, substituted alkenyl, substituted alkynyl, substituted alkynyl, cycloalkyl, substituted cycloalkyl, cycloalkenyl, substituted cycloalkenyl, aryl, heteroaryl and heterocyclic;

R<sup>10</sup> is selected from the group consisting of hydrogen, alkyl, substituted alkyl, alkenyl, substituted alkynyl, substituted alkynyl, cycloalkyl, substituted cycloalkyl, cycloalkenyl, substituted cycloalkenyl, aryl, heteroaryl and heterocyclic; or R<sup>8</sup> and R<sup>10</sup> are joined to form -Ar<sup>1</sup>-O-Ar<sup>2</sup>-, where Ar<sup>1</sup> and Ar<sup>2</sup> are independently arylene or heteroarylene;

R<sup>11</sup> is selected from the group consisting of hydrogen, alkyl, substituted alkyl, alkenyl, substituted alkynyl, substituted alkynyl, cycloalkyl, substituted cycloalkyl, cycloalkenyl, substituted cycloalkenyl, aryl, heteroaryl and heterocyclic, or R<sup>10</sup> and R<sup>11</sup> are joined, together with the carbon and nitrogen atoms to which they are attached, to form a heterocyclic ring;

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 $R^{12}$  is selected from the group consisting of hydrogen, alkyl, substituted alkyl, alkenyl, substituted alkenyl, alkynyl, substituted alkynyl, cycloalkyl, substituted cycloalkenyl, aryl, heteroaryl, heterocyclic,  $-C(O)R^d$ ,  $-C(NH)R^d$ ,  $-C(O)NR^cR^c$ ,  $-C(O)OR^d$ ,  $-C(NH)NR^cR^c$  and  $-R^a-Y-R^b-(Z)_x$ , or  $R^{11}$  and  $R^{12}$  are joined, together with the nitrogen atom to which they are attached, to form a heterocyclic ring;

R<sup>13</sup> is selected from the group consisting of hydrogen or -OR<sup>14</sup>;

R<sup>14</sup> is selected from hydrogen, -C(O)R<sup>d</sup> and a saccharide group;
each R<sup>a</sup> is independently selected from the group consisting of alkylene,
substituted alkylene, alkenylene, substituted alkynylene, alkynylene and substituted alkynylene;

each R<sup>b</sup> is independently selected/from the group consisting of a covalent bond, alkylene, substituted alkylene, alkenylene, substituted alkenylene, alkynylene and substituted alkynylene provided R<sup>b</sup> is not a covalent bond when Z is hydrogen;

each  $R^c$  is independently selected from the group consisting of hydrogen, alkyl, substituted alkyl, alkenyl, substituted alkynyl, substituted alkynyl, cycloalkyl, substituted cycloalkyl, cycloalkenyl, substituted cycloalkenyl, aryl, heteroaryl, heterocyclic and  $+C(\Phi)R^d$ 

each R<sup>d</sup> is independently selected from the group consisting of alkyl, substituted alkyl, alkenyl, substituted alkynyl, substituted alkynyl, cycloalkyl, substituted cycloalkyl, cycloalkenyl, substituted cycloalkenyl, aryl, heteroaryl and heterocyclic;

Re is a saccharide group;

X<sup>1</sup>, X<sup>2</sup> and X<sup>3</sup> are independently selected from hydrogen or chloro; each Y is independently selected from the group consisting of oxygen, sulfur, -S-S-, -NR<sup>c</sup>-, -S(O)-, -SO<sub>2</sub>-, -NR<sup>c</sup>C(O)-, -OSO<sub>2</sub>-, -OC(O)-, -NR<sup>c</sup>SO<sub>2</sub>-, -C(O)NR<sup>c</sup>-, -C(O)O-, -SO<sub>2</sub>NR<sup>c</sup>-, -SO<sub>2</sub>O-, -P(O)(OR<sup>c</sup>)O-,

ij.

17. The compound of Claim 16, wherein R<sup>1</sup> is a saccharide group of the formula:

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wherein

 $R^{15}$  is  $-R^a-Y-R^b-(Z)_x$ ; and

R<sup>16</sup> is hydrogen or methyl

The compound of Claim 17, wherein  $R^{15}$  is a  $-R^a-Y-R^b-(Z)_x$  group 18.

5 selected from the group consisting of:

 $-CH_2CH_2-NH-(CH_2)/CH_3$ ;

-CH2CH2CH2-NH-(// 1/2)/8CH3;

-CH<sub>2</sub>CH<sub>2</sub>CH<sub>2</sub>CH<sub>2</sub>-NH (CH<sub>2</sub>)CH<sub>3</sub>;

-CH<sub>2</sub>CH<sub>2</sub>-NHSO<sub>2</sub>/(CH<sub>2</sub>)<sub>9</sub>CH<sub>3</sub>

10 -CH<sub>2</sub>CH<sub>2</sub>-NHSO<sub>2</sub>/(CH<sub>2</sub>)<sub>11</sub>CH<sub>3</sub>

-CH<sub>2</sub>CH<sub>2</sub>-S-(CH<sub>2</sub>),CH<sub>3</sub>;

 $-CH_2CH_2-S-(CH_2)_9CH_3$ ;

 $-CH_2CH_2-S-(CH_2)_{10}CH_3;$ 

 $-CH_2CH_2CH_2-S-(CH_2)$   $CH_3$ ;

-CH<sub>2</sub>CH<sub>2</sub>CH<sub>2</sub>-S-(CH<sub>2</sub>)CH<sub>3</sub>; 15

 $-CH_2CH_2CH_2-S-(CH_2)_3$  CH = CH-(CH<sub>2</sub>)<sub>4</sub>CH<sub>3</sub> (trans);

 $-CH_2CH_2CH_2CH_2-S-(CH_2)_7CH_3;$ 

 $-CH_2CH_2-S(O)-(CH_2)_9CH_3;$ 

 $-CH_2CH_2-S-(CH_2)_6Ph;$ 

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-150--
                       -CH_2CH_2-S-(CH_2)_8Ph;
                       -CH_2CH_2CH_2-S-(CH_2)_8Ph;
                       -CH<sub>2</sub>CH<sub>2</sub>-NH-CH<sub>2</sub>-4-(4-Cl-Ph)-Ph;
                       -CH<sub>2</sub>CH<sub>2</sub>-NH-CH<sub>2</sub>-4-[4-CH<sub>3</sub>)<sub>2</sub>CHCH<sub>2</sub>-]-Ph;
   5
                       -CH<sub>2</sub>CH<sub>2</sub>-NH-CH<sub>2</sub>-4-(4-CF<sub>3</sub>-Ph)-Ph;
                       -CH<sub>2</sub>CH<sub>2</sub>-S-CH<sub>2</sub>-4-(4-Cl-Ph)-Ph;
                       -CH<sub>2</sub>CH<sub>2</sub>-S(O)-CH<sub>2</sub>-4-(4-Cl-Ph)-Ph;
                       -CH<sub>2</sub>CH<sub>2</sub>CH<sub>2</sub>-S-CH<sub>2</sub>-4-(4-Cl-Ph)-Ph;
                       -CH<sub>2</sub>CH<sub>2</sub>-S(O)-CH<sub>2</sub>-4-(4-Q1-Ph)-Ph;
                      -CH<sub>2</sub>CH<sub>2</sub>CH<sub>2</sub>-S-CH<sub>2</sub>-4-[3,4-di-Cl-PhCH<sub>2</sub>O-)-Ph;
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                      -CH<sub>2</sub>CH<sub>2</sub>-NHSO<sub>2</sub>-CH<sub>2</sub>/4-[4/(4-Ph)-Ph]-Ph;
                      -CH<sub>2</sub>CH<sub>2</sub>-NHSO<sub>2</sub>/CH<sup>2</sup>/4-(4-Cl-Ph)-Ph;
                      -CH_2CH_2-CH_2-NHSO/-CH_2-4/(Ph-C=C-)-Ph;
                      -CH<sub>2</sub>CH<sub>2</sub>CH<sub>2</sub>-NHSQ<sub>2</sub>-4-(4-Cl-Ph)-Ph; and
                      -CH_2CH_2CH_2-NHS\phi_2-\cancel{A}(haphth-2-yl)-Ph.
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                                The compound of Claim 15, wherein R3 is -OH or -NRCRC.
                      19.
                                The compound of Claim 15, wherein R5 is hydrogen, -CH2-N-(N-
                     20.
           CH<sub>3</sub>-D-glucamine); -CH<sub>2</sub>-NH-CH<sub>2</sub>CH<sub>2</sub>-NH-(CH<sub>2</sub>)<sub>9</sub>CH<sub>3</sub>; -CH<sub>2</sub>-NH-CH<sub>2</sub>CH<sub>2</sub>-NH-
           (CH_2)_{11}CH_3; -CH_2-NH-(CH_2)_5-CO\phi H; and -CH_2-N-(2-amino-2-deoxygluconic)
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           acid).
                                The compound of Claim 15, wherein R8 is -CH2C(O)NH2,
                     21.
          -CH<sub>2</sub>COOH, benzyl, 4-hydroxyphenyl or 3-chloro-4-hydroxyphenyl.
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22. The compound of Claim 15, wherein R<sup>9</sup> is hydrogen and R<sup>11</sup> is hydrogen or methyl.

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23. The compound of Claim  $2^{\frac{1}{2}}$ , wherein  $R^{10}$  is alkyl or substituted alkyl.

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24. The compound of Claim 23, wherein  $R^{12}$  is hydrogen, alkyl, substituted alkyl or  $-C(O)R^d$ .

25. The compound of Claim 24, wherein n is 1.

26. A compound of formula II:

HO 
$$R^{26}$$
 $R^{26}$ 
 $R^{27}$ 
 $R^{22}$ 
 $R^{23}$ 
 $R^{23}$ 
 $R^{23}$ 
 $R^{24}$ 
 $R^{25}$ 
 $R^{27}$ 
 $R^{27}$ 
 $R^{27}$ 

 $R^{21}$  is selected from the group consisting of hydrogen, alkyl, substituted alkyl, alkenyl, substituted alkynyl, substituted alkynyl, cycloalkyl, substituted cycloalkyl, cycloalkenyl, substituted cycloalkenyl, aryl, heteroaryl, heterocyclic and  $-R^a-Y-R^b-(Z)_x$ ; or a saccharide group optionally substituted with  $-R^a-Y-R^b-(Z)_x$ ;

 $R^{22}$  is  $-OR^c$ ,  $-NR^cR^c$ ,  $-O-R^a-Y-R^b-(Z)_x$  or  $-NR^c-R^a-Y-R^b-(Z)_x$ ;  $R^{23}$  is selected from the group consisting of hydrogen, halo,  $-CH(R^c)-NR^cR^c$ ,  $-CH(R^c)-R^c$  and  $-CH(R^c)-NR^c-R^a-Y-R^b-(Z)_x$ ;  $R^{24}$  is selected from the group consisting of hydrogen and lower alkyl;

R<sup>25</sup> is selected from the group consisting of hydrogen, alkyl, substituted alkyl, alkenyl, substituted alkenyl, substituted alkynyl, substituted alkynyl, cycloalkyl, substituted cycloalkyl, cycloalkenyl, substituted cycloalkenyl, aryl, heteroaryl and heterocyclic;

 $R^{26}$  is selected from the group consisting of hydrogen and lower alkyl; or  $R^{25}$  and  $R^{26}$  are joined, together with the carbon and nitrogen atoms to which they are attached, to form a heterocyclic ring;

 $R^{27}$  is selected from the group consisting of hydrogen, alkyl, substituted alkyl, alkenyl, substituted alkynyl, substituted alkynyl, cycloalkyl, substituted cycloalkenyl, aryl, heteroaryl, heterocyclic,  $-C(O)R^d$ ,  $-C(NH)R^d$ ,  $-C(O)NR^cR^c$ ,  $-C(O)OR^d$ ,  $-C(NH)NR^cR^c$  and  $-R^a-Y-R^b-(Z)_x$ , or  $R^{26}$  and  $R^{27}$  are joined, together with the nitrogen atom to which they are attached, to form a heterocyclic ring;

each R<sup>a</sup> is independently selected from the group consisting of alkylene, substituted alkylene, alkenylene, substituted alkynylene and substituted alkynylene;

each R<sup>b</sup> is independently selected from the group consisting of a covalent bond, alkylene, substituted alkylene, alkenylene, substituted alkenylene, alkynylene and substituted alkynylene, provided R<sup>b</sup> is not a covalent bond when Z is hydrogen;

each  $R^c$  is independently selected from the group consisting of hydrogen, alkyl, substituted alkyl, alkenyl, substituted alkynyl, substituted alkynyl, cycloalkyl, substituted cycloalkyl, cycloalkenyl, substituted cycloalkenyl, aryl, heteroaryl, heterocyclic and  $-C(\Phi)R^d$ ;

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each R<sup>d</sup> is independently selected from the group consisting of alkyl, substituted alkyl, alkenyl, substituted alkynyl, substituted alkynyl, cycloalkyl, substituted cycloalkyl, cycloalkenyl, substituted cycloalkenyl, aryl, heteroaryl and heterocyclic;

Re is an aminosaccharide group;

each Y is independently selected from the group consisting of oxygen, sulfur,  $-S-S-,-NR^c-,-S(O)-,-SO_2-,-NR^cC(O)-,-OSO_2-,-OC(O)-,$ 

 $-NR^{c}SO_{2}^{-}$ ,  $-C(O)NR^{c}$ ,  $-C(O)O^{-}$ ,  $-SO_{2}NR^{c}$ ,  $-SO_{2}O^{-}$ ,  $-P(O)(OR^{c})O^{-}$ ,

 $-P(O)(OR^c)NR^{c-}$ ,  $-OP(O)(OR^c)O + OP(O)(OR^c)NR^{c-}$ , -OC(O)O-,

 $-NR^{c}C(O)O-$ ,  $-NR^{c}C(O)NR^{c}-$ ,  $-OC(O)NR^{c}-$  and  $-NR^{c}SO_{2}NR^{c}-$ ;

each Z is independently selected from hydrogen, aryl, cycloalkyl, cycloalkenyl, heteroaryl and heterocyclic;

n is 0, 1 or 2;

x is 1 or 2;

and pharmaceutically acceptable salts, stereoisomers and prodrugs thereof; provided that at least one of  $R^{21}$ ,  $R^{22}$ ,  $R^{23}$  or  $R^{27}$  has a substitutent of the formula  $-R^a-Y-R^b-(Z)_x$ ;

and further provided that:

- (i) when Y is -NR<sup>c</sup>-, R is alkyl of 1 to 4 carbon atoms, Z is hydrogen and R<sup>b</sup> is alkylene, then R<sup>b</sup> contains at least 5 carbon atoms;
  - (ii) when Y is -C(O)NR<sup>c</sup>-, Z is hydrogen and R<sup>b</sup> is alkylene, then R<sup>b</sup> contains at least 5 carbon atoms;
- (iii) when Y is sulfur, Z is hydrogen and R<sup>b</sup> is alkylene, then R<sup>b</sup> contains at least 7 carbon atoms; and
- (iv) when Y is oxygen, Z is hydrogen and R<sup>b</sup> is alkylene, then R<sup>b</sup> contains at least 11 carbon atoms.
- The compound of Claim 26, wherein  $\mathbb{R}^{21}$  is a saccharide group of the formula:

wherein

 $R^{15}$  is  $-R^a-Y-R^b-(Z)_x$ , and

R<sup>16</sup> is hydrogen or methyl.

The compound of  $\angle$  laim 27, wherein  $R^{15}$  is a  $-R^a-Y-R^b-(Z)_x$  group 28.

selected from the group consisting of 5

 $-CH_2CH_2-NH-(CH_2)_9$   $H_3$ ;

 $-CH_2CH_2CH_2-NH-(QH_2)_8CH_3$ 

-CH<sub>2</sub>CH<sub>2</sub>CH<sub>2</sub>CH<sub>2</sub>-NH<sub>1</sub>-(CH<sub>2</sub>)<sub>7</sub>CH<sub>3</sub>;

-CH<sub>2</sub>CH<sub>2</sub>-NHSO<sub>2</sub>-(CH<sub>2</sub>)<sub>9</sub>CH<sub>3</sub>;

 $-CH_2CH_2-NHSO_2-\langle CH_2\rangle_{11}CH_3;$ 10

-CH<sub>2</sub>CH<sub>2</sub>-S-(CH<sub>2</sub>), CH<sub>3</sub>;

-CH<sub>2</sub>CH<sub>2</sub>-S-(CH<sub>2</sub>) CH<sub>3</sub>

-CH<sub>2</sub>CH<sub>2</sub>-S-(CH<sub>2</sub>)<sub>10</sub>CH<sub>3</sub>;

-CH<sub>2</sub>CH<sub>2</sub>CH<sub>2</sub>-S-(CH<sub>2</sub>)<sub>8</sub>CH<sub>3</sub>;

 $-CH_{2}CH_{2}CH_{2}-S-(CH_{2})_{9}CH_{3};$ 15

 $-CH_2CH_2CH_2-S-(CH_2)_3-CH=CH-(CH_2)_4CH_3$  (trans);

 $-CH_{2}CH_{2}CH_{2}CH_{2}-S-(CH_{2}^{\dagger})_{7}CH_{3};$ 

 $-CH_2CH_2-S(O)-(CH_2)_9CH_9;$ 

 $-CH_2CH_2-S-(CH_2)_6Ph;$ 

20  $-CH_2CH_2-S-(CH_2)_8Ph$ ;

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-CH<sub>2</sub>CH<sub>2</sub>CH<sub>2</sub>-S-(CH<sub>2</sub>)<sub>8</sub>Ph;
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- -CH<sub>2</sub>CH<sub>2</sub>-NH-CH<sub>2</sub>-4-(4-Cl-Ph)-Ph;
- -CH<sub>2</sub>CH<sub>2</sub>-NH-CH<sub>2</sub>-4-[4-CH<sub>3</sub>)<sub>2</sub>CHCH<sub>2</sub>-]-Ph;
- $-CH_2CH_2-NH-CH_2-4-(4-CF_3-Ph)-Ph;$
- 5  $-CH_2CH_2-S-CH_2-4-(4-Cl-Ph)-Ph$ ;
  - $-CH_2CH_2-S(O)-CH_2-4-(4-Cl-Ph)-Ph;$
  - $-CH_2CH_2CH_2-S-CH_2-4-(4-Cl-Ph)-Ph;$
  - -CH<sub>2</sub>CH<sub>2</sub>CH<sub>2</sub>-S(O)-CH<sub>2</sub>-4-(4-Cl-Ph)-Ph;
  - -CH<sub>2</sub>CH<sub>2</sub>CH<sub>2</sub>-S-CH<sub>2</sub>-4-[3,4|di-Cl-PhCH<sub>2</sub>O-)-Ph;
- 10  $-CH_2CH_2-NHSO_2-CH_2-4-[4](4-Ph)-Ph]-Ph;$ 
  - -CH<sub>2</sub>CH<sub>2</sub>CH<sub>2</sub>-NHSO<sub>2</sub>-CH<sub>2</sub>-4-(4-¢/1-Ph)-Ph;
  - $-CH_2CH_2CH_2-NHSO_2-CH_2-4-(Ph-C=C-)-Ph;$
  - -CH<sub>2</sub>CH<sub>2</sub>CH<sub>2</sub>-NHSO<sub>2</sub>-4-(4-CHPh)-Ph; and
  - -CH<sub>2</sub>CH<sub>2</sub>CH<sub>2</sub>-NHSO<sub>2</sub>-4-(naphth-2-yl)-Ph.
  - 29. The compound of Claim 26, wherein R<sup>22</sup> is -OH or -NR<sup>c</sup>R<sup>c</sup>.
  - 30. The compound of Claim 26, wherein R<sup>23</sup> is hydrogen, -CH<sub>2</sub>-N-(N-CH<sub>3</sub>-D-glucamine); -CH<sub>2</sub>-NH-CH<sub>2</sub>CH<sub>2</sub>-NH-(CH<sub>2</sub>)<sub>9</sub>CH<sub>3</sub>; -CH<sub>2</sub>-NH-CH<sub>2</sub>CH<sub>2</sub>-NH-(CH<sub>2</sub>)<sub>11</sub>CH<sub>3</sub>; -CH<sub>2</sub>-NH-(CH<sub>2</sub>)<sub>5</sub>-COOH; or -CH<sub>2</sub>-N-(2-amino-2-deoxygluconic acid).
- 31. The compound of Claim 26, wherein R<sup>24</sup> is hydrogen and R<sup>26</sup> is hydrogen or methyl.
  - 32. The compound of Claim 31, wherein  $R^{25}$  is alkyl or substituted alkyl.
    - 33. The compound of Claim 32, wherein R<sup>25</sup> is isobutyl.

- 34. The compound of Claim 33, wherein  $R^{27}$  is hydrogen, alkyl, substituted alkyl or  $-C(O)R^d$ .
- 35. A compound shown in any of Tables I, II, III, IV, V or VI, or a pharmaceutically-acceptable salt thereof.
- 36. A pharmaceutical composition comprising a pharmaceutically-acceptable carrier and a therapeutically effective amount of a glycopeptide compound having at least one substituent of the formula:

 $-R^a-Y-R^b-(Z)$ 

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wherein

each R<sup>a</sup> is independently selected from the group consisting of alkylene, substituted alkylene, alkenylene, substituted alkynylene and substituted alkynylene;

bond, alkylene, substituted alkylene, alkenylene, substituted alkenylene, alkynylene and substituted alkynylene, provided R<sup>b</sup> is not a covalent bond when Z is hydrogen;

each Y is independently selected from the group consisting of oxygen, sulfur, -S-S-,  $-NR^c-$ , -S(O)-,  $-SO_2-$ ,  $-NR^cC(O)-$ , -OC(O)-,  $-NR^cSO_2-$ ,  $-OSO_2-$ ,  $-C(O)NR^c-$ , -C(O)O-,  $-SO_2NR^c-$ ,  $-SO_2O-$ ,  $-P(O)(OR^c)O-$ ,  $-P(O)(OR^c)NR^c-$ ,  $-OP(O)(OR^c)NR^c-$ , -OC(O)O-,

-NR<sup>c</sup>C(O)O-, -NR<sup>c</sup>C(O)NR<sup>c</sup>-, -OC(O)NR<sup>c</sup>- and -NR<sup>c</sup>SO<sub>2</sub>NR<sup>c</sup>-; each Z is independently selected from hydrogen, aryl, cycloalkyl,

cycloalkenyl, heteroaryl and heterocyclic;

each R<sup>c</sup> is independently selected from the group consisting of hydrogen, alkyl, substituted alkyl, alkenyl, substituted alkynyl, substituted alkynyl,

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cycloalkyl, substituted cycloalkyl, cycloalkenyl, substituted cycloalkenyl, aryl, heteroaryl, heterocyclic and  $-C(O)R^d$ ;

each R<sup>d</sup> is independently selected from the group consisting of alkyl, substituted alkyl, alkenyl, substituted alkynyl, substituted alkynyl, cycloalkyl, substituted cycloalkyl, cycloalkenyl, substituted cycloalkenyl, aryl, heteroaryl and heterocyclic;

x is 1 or 2;

and pharmaceutically acceptable salts thereof; provided that:

10 (i) when Y is -NR<sup>c</sup>-, R<sup>c</sup> is alkyl of 1 to 4 carbon atoms, Z is hydrogen and R<sup>b</sup> is alkylene, then R<sup>b</sup> contains at least/5 carbon atoms;

(ii) when Y is -C(O)NR<sup>c</sup>-, Z is hydrogen and R<sup>b</sup> is alkylene, then R<sup>b</sup> contains at least 5 carbon atoms;

(iii) when Y is sulfur, Z is hydrogen and R<sup>b</sup> is alkylene, then R<sup>b</sup> contains at least 7 carbon atoms; and

(iv) when Y is oxygen, Z is hydrogen and R<sup>b</sup> is alkylene, then R<sup>b</sup> contains at least 11 carbon atoms.

37. The pharmaceutical composition of Claim 36, wherein the glycopeptide compound is substituted with from 1 to 3 substituents of the formula  $-R^a-Y-R^b-(Z)_x$ .

- 38. The pharmaceutical composition of Claim 37, wherein each R<sup>a</sup> is independently selected from alkylene having from 1 to 10 carbon atoms.
- 39. The pharmaceutical composition of Claim 38, wherein R<sup>a</sup> is ethylene or propylene.

- 40. The pharmaceutical composition of Claim 37, wherein Z is hydrogen and R<sup>b</sup> is alkylene of from 8 to 12 carbon atoms.
- 41. The pharmaceutical composition of Claim 40, wherein  $\mathbb{R}^b$  and  $\mathbb{Z}$  form an n-octyl, n-nonyl, n-decyl, n-undecyl or n-dodecyl group.
- The pharmaceutical composition of Claim 37, wherein Z is aryl, cycloalkyl, cycloalkenyl, heteroaryl or heterocyclic and R<sup>b</sup> is a covalent bond or alkylene of from 1 to 10 carbon atoms.
  - 43. The pharmaceutical composition of Claim 42, wherein Z is aryl and  $R^b$  is a covalent bond, methylene,  $-(CH_2)_{6^-}$ ,  $-(CH_2)_{7^-}$ ,  $-(CH_2)_{9^-}$  or  $-(CH_2)_{10^-}$ .
  - 44. The pharmaceutical composition of Claim 37, wherein each Y is independently selected from the group consisting of oxygen, sulfur, -S-S-, -NR<sup>c</sup>-, -S(O)-, -SO<sub>2</sub>-, -NR<sup>c</sup>C(O)-, -OC(O)-, -NR<sup>c</sup>SO<sub>2</sub>-, -C(O)NR<sup>c</sup>-, -C(O)O- and -SO<sub>2</sub>NR<sup>c</sup>-.
- 15 45. The pharmaceutical composition of Claim 44, wherein Y is oxygen, sulfur, -NR<sup>c</sup>- or -NR<sup>c</sup>SO<sub>2</sub>-.
  - 46. The pharmaceutical composition of Claim 37, wherein each Z is independently selected from hydrogen, aryl, cycloalkyl, heteroaryl and heterocyclic.
- 20 47. The pharmaceutical composition of Claim 46, wherein Z is hydrogen or aryl.

48. The pharmaceutical composition of Claim 47, wherein Z is phenyl, substituted phenyl, biphenyl, substituted biphenyl or terphenyl.

49. The pharmaceutical composition of Claim 37, wherein the  $-R^a-Y-R^b-(Z)_x$  group is selected from the group consisting of:

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                          -CH_2CH_2-NH-(CH_2)_9CH_3;
                         -CH<sub>2</sub>CH<sub>2</sub>CH<sub>2</sub>-NH-(CH<sub>2</sub>)<sub>8</sub>CH<sub>3</sub>;
                         -CH_2CH_2CH_2CH_2-NH-(CH_2)_7CH3;
                         -CH<sub>2</sub>CH<sub>2</sub>-NHSO<sub>2</sub>-(CH<sub>2</sub>)<sub>9</sub>CH<sub>3</sub>;
                         -CH<sub>2</sub>CH<sub>2</sub>-NHSO<sub>2</sub>-(CH<sub>2</sub>)<sub>11</sub>CH<sub>3</sub>;
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                         -CH_2CH_2-S-(CH_2)_8CH_3;
                         -CH<sub>2</sub>CH<sub>2</sub>-S-(CH<sub>2</sub>)<sub>9</sub>CH<sub>3</sub>;
                         -CH_2CH_2-S-(CH_2)_{10}CH_3;
                        -CH_2CH_2CH_2-S-(CH_2)_8CH_3';
                        -CH_2CH_2CH_2-S-(CH_2)_9CH_3
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                        -CH_2CH_2CH_2-S-(CH_2)_3-CH_2
                                                                         H = CH - (CH_2)_4 CH_3 (trans);
                        -CH<sub>2</sub>CH<sub>2</sub>CH<sub>2</sub>-S-(CH<sub>2</sub>)/CH
                        -CH<sub>2</sub>CH<sub>2</sub>-S(O)-(CH<sub>2</sub>)<sub>9</sub>CH<sub>3</sub>;
                        -CH_2CH_2-S-(CH_2)_6Ph;
                        -CH_2CH_2-S-(CH_2)_8Ph;
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                        -CH_2CH_2CH_2-S-(CH_2)_8\dot{P}_n^h;
                        -CH<sub>2</sub>CH<sub>2</sub>-NH-CH<sub>2</sub>-4-(4/Cl-Ph)-Ph;
                        -CH<sub>2</sub>CH<sub>2</sub>-NH-CH<sub>2</sub>-4-[4|CH<sub>3</sub>)2CHCH<sub>2</sub>-]-Ph;
                        -CH<sub>2</sub>CH<sub>2</sub>-NH-CH<sub>2</sub>-4-(4-CF<sub>3</sub>-Ph)-Ph;
                        -CH<sub>2</sub>CH<sub>2</sub>-S-CH<sub>2</sub>-4-(4-Cl-Ph)-Ph;
                       -CH_2CH_2-S(O)-CH_2-4-(4-Cl-Ph)_{T-Ph};
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                       -CH<sub>2</sub>CH<sub>2</sub>CH<sub>2</sub>-S-CH<sub>2</sub>-4-(4-Cl-Ph)-Ph;
                       -CH_2CH_2CH_2-S(O)-CH_2-4-(4-Cl-P_h)-Ph;
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-CH<sub>2</sub>CH<sub>2</sub>CH<sub>2</sub>-S-CH<sub>2</sub>-4-[3,4-di-Cl-PhCH<sub>2</sub>O-)-Ph;

--160---CH<sub>2</sub>CH<sub>2</sub>-NHSO<sub>2</sub>-CH<sub>2</sub>-4-[4-(4-Ph)-Ph]-Ph; -CH<sub>2</sub>CH<sub>2</sub>CH<sub>2</sub>-NHSO<sub>2</sub>-CH<sub>2</sub>-4-(4-Cl-Ph)-Ph;  $-CH_2CH_2CH_2-NHSO_2-CH_2-4-(Ph-C=C-)-Ph;$ -CH<sub>2</sub>CH<sub>2</sub>-NHSO<sub>2</sub>-4-(4-Cl-Ph)-Ph; and  $-CH_2CH_2CH_2-NHSO_2-4-(naphth-2-yl)-Ph.\\$ 

A pharmaceutical composition comprising a pharmaceutically-50. acceptable carrier and a therapeutically effective amount of a compound of

formula I:

$$R^2 O$$
 $NH$ 
 $R^3$ 
 $R^4 O$ 
 $R^5$ 
 $R^6$ 
 $R^7$ 
 $R^7$ 
 $R^7$ 
 $R^8$ 
 $R^8$ 

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R1 is selected from the group consisting of hydrogen, alkyl, substituted alkyl, alkenyl, substituted alkenyl, alkynyl, substituted alkynyl, cycloalkyl, substituted cycloalkyl, cycloalkenyl, substituted cycloalkenyl, aryl, heteroaryl, heterocyclic and  $-R^a-Y-R^b-(Z)_x$ ; or a saccharide group optionally substituted with  $-R^a-Y-R^b-(Z)$ ,

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 $R^2$  is hydrogen or a saccharide group optionally substituted with  $-R^a-Y-R^b-(Z)_x$ ;

 $R^{3}$  is  $-OR^{c}$ ,  $-NR^{c}R^{c}$ ,  $-O-R^{a}-Y+R^{b}-(Z)_{x}$ ,  $-NR^{c}-R^{a}-Y-R^{b}-(Z)_{x}$ ,  $-NR^{c}R^{e}$ , or  $-O-R^{e}$ ;

 $R^4$  is selected from the group consisting of hydrogen, alkyl, substituted alkyl, alkenyl, substituted alkenyl, alkynyl, substituted alkynyl,  $-R^a-Y-R^b-(Z)_x$ ,  $-C(O)R^d$  and a saccharide group optionally substituted with  $-R^a-Y-R^b-(Z)_x$ ;

R<sup>5</sup> is selected from the group consisting of hydrogen, halo,
-CH(R<sup>c</sup>)-NR<sup>c</sup>R<sup>c</sup>, -CH(R<sup>c</sup>)-NR<sup>c</sup>R<sup>e</sup> and -CH(R<sup>c</sup>)-NR<sup>c</sup>-R<sup>a</sup>-Y-R<sup>b</sup>-(Z)<sub>x</sub>;

 $R^6$  is selected from the group consisting of hydrogen, alkyl, substituted alkyl, alkenyl, substituted alkynyl, substituted alkynyl,  $-R^a-Y-R^b-(Z)_x$ ,  $-C(O)R^d$  and a saccharide group optionally substituted with  $-NR^c-R^a-Y-R^b-(Z)_x$ , or  $R^5$  and  $R^6$  can be joined, together with the atoms to which they are attached, form a heterocyclic ring optionally substituted with  $-NR^c-R^a-Y-R^b-(Z)_x$ ;

 $R^7$  is selected from the group consisting of hydrogen, alkyl, substituted alkyl, alkenyl, substituted alkenyl, alkynyl, substituted alkynyl,  $-R^a-Y-R^b-(Z)_x$ , and  $-C(O)R^d$ ;

R<sup>8</sup> is selected from the group consisting of hydrogen, alkyl, substituted alkyl, alkenyl, substituted alkynyl, substituted alkynyl, substituted alkynyl, cycloalkyl, substituted cycloalkyl, cycloalkenyl, substituted cycloalkenyl, aryl, heteroaryl and heterocyclic;

R<sup>9</sup> is selected from the group consisting of hydrogen, alkyl, substituted alkyl, alkenyl, substituted alkynyl, substituted alkynyl, cycloalkyl, substituted cycloalkyl, cycloalkenyl, substituted cycloalkenyl, aryl, heteroaryl and heterocyclic;

R<sup>10</sup> is selected from the group consisting of hydrogen, alkyl, substituted alkyl, alkenyl, substituted alkenyl, alkynyl, substituted alkynyl, cycloalkyl, substituted cycloalkyl, cycloalkenyl, substituted cycloalkenyl, aryl, heteroaryl and

heterocyclic; or  $R^8$  and  $R^{10}$  are joined to form  $-Ar^1-O-Ar^2-$ , where  $Ar^1$  and  $Ar^2$  are independently arylene or heteroarylene;

R<sup>11</sup> is selected from the group consisting of hydrogen, alkyl, substituted alkyl, alkenyl, substituted alkenyl, alkynyl, substituted alkynyl, cycloalkyl, substituted cycloalkyl, cycloalkenyl, substituted cycloalkenyl, aryl, heteroaryl and heterocyclic, or R<sup>10</sup> and R<sup>11</sup> are joined, together with the carbon and nitrogen atoms to which they are attached, to form a heterocyclic ring;

 $R^{12}$  is selected from the group consisting of hydrogen, alkyl, substituted alkyl, alkenyl, substituted alkynyl, substituted alkynyl, cycloalkyl, substituted cycloalkyl, cycloalkenyl, substituted cycloalkenyl, aryl, heteroaryl, heterocyclic,  $-C(O)R^d$ ,  $-C(NH)R^d$ ,  $-C(O)NR^cR^c$ ,  $-C(O)OR^d$ ,  $-C(NH)NR^cR^c$  and  $-R^a-Y-R^b-(Z)_x$ , or  $R^{11}$  and  $R^{12}$  are joined, together with the nitrogen atom to which they are attached, to form a heterocyclic ring;

R<sup>13</sup> is selected from the group consisting of hydrogen or -OR<sup>14</sup>;

R<sup>14</sup> is selected from hydrogen -C(9)R<sup>d</sup> and a saccharide group;

each R<sup>a</sup> is independently selected from the group consisting of alkylene, substituted alkylene, alkenylene, substituted alkynylene and substituted alkynylene;

each R<sup>b</sup> is independently selected from the group consisting of a covalent bond, alkylene, substituted alkylene, alkenylene, substituted alkenylene, alkynylene and substituted alkynylene, provided R<sup>b</sup> is not a covalent bond when Z is hydrogen;

each R<sup>c</sup> is independently selected from the group consisting of hydrogen, alkyl, substituted alkyl, alkenyl, substituted alkynyl, substituted alkynyl, substituted alkynyl, cycloalkyl, substituted cycloalkyl, cycloalkenyl, substituted cycloalkenyl, aryl, heteroaryl, heterocyclic and -C(O)R<sup>d</sup>;

each R<sup>d</sup> is independently selected from the group consisting of alkyl, substituted alkyl, alkenyl, substituted alkynyl, substituted alkynyl,

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cycloalkyl, substituted cycloalkyl, cycloalkenyl, substituted cycloalkenyl, aryl, heteroaryl and heterocyclic: R<sup>e</sup> is a saccharide group;  $X^1$ ,  $X^2$  and  $X^3$  are independently selected from hydrogen or chloro; 5 each Y is independently selected from the group consisting of oxygen, sulfur, -S-S-,  $-NR^{c}-$ , -S(O)-,  $-SO_{2}-$ ,  $-NR^{c}C(O)-$ ,  $-OSO_{2}-$ , -OC(O)-,  $-NR^{c}SO_{2}^{-}$ ,  $-C(O)NR^{c}$ ,  $-C(O)O_{-}$ ,  $-SO_{2}NR^{c}$ ,  $-SO_{2}O_{-}$ ,  $-P(O)(OR^{c})O_{-}$ ,  $-P(O)(OR^c)NR^{c-}$ ,  $-OP(O)(OR^c)O-$ ,  $-OP(O)(OR^c)NR^{c-}$ , -OC(O)O-, -NR°C(O)O-, -NR°C(O)NR°-, - $\oint$ C(O)NR°- and -NR°SO<sub>2</sub>NR°-; each Z is independently selected from hydrogen, aryl, cycloalkyl, 10 cycloalkenyl, heteroaryl and heterocyclic; n is 0, 1 or 2; x is 1 or 2; and pharmaceutically acceptable salts, stereoisomers and prodrugs thereof; provided that at least one of R, R<sup>2</sup>, R<sup>3</sup>, R<sup>4</sup>, R<sup>5</sup>, R<sup>6</sup>, R<sup>7</sup> or R<sup>12</sup> has a 15 substitutent of the formula  $-R^a - Y - R^b - (Z)_x$ ; and further provided that: when Y is  $-NR^{c}/$ ,  $R^{c}$  is alkyl of 1/1 to 4 carbon atoms, Z is hydrogen (i) and R<sup>b</sup> is alkylene, then R<sup>b</sup> contains at least 5 carbon atoms; 20 when Y is  $-C(\phi)NR^{l_c}$ , Z is hydrogen and R<sup>b</sup> is alkylene, then R<sup>b</sup> (ii) contains at least 5 carbon atoms;/ when Y is sulfur, Z is hydrogen and Rb is alkylene, then Rb (iii) contains at least 7 carbon atoms; and (iv) when Y is oxygen, Z is hydrogen and Rb is alkylene, then Rb 25 contains at least 11 carbon atoms. The pharmaceutical composition of Claim 50, wherein R1 is a 51. saccharide group optionally substituted with  $-R^a-Y-R^b-(Z)_x$ .

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52. The pharmaceutical composition of Claim 51, wherein R<sup>1</sup> is a saccharide group of the formula:

wherein

 $R^{15}$  is  $-R^a-Y-R^b-(Z)_x$  and

R<sup>16</sup> is hydrogen or methyl.

53. The pharmaceutical composition of Claim 52, wherein R<sup>15</sup> is a -R<sup>a</sup>-Y-R<sup>b</sup>-(Z)<sub>x</sub> group selected from the group consisting of:

-CH<sub>2</sub>CH<sub>2</sub>-NH-(CH<sub>2</sub>)<sub>9</sub>CH<sub>3</sub>;

 $-CH_2CH_2CH_2-NH/(CH_2)_8CH_3$ ;

10 -CH<sub>2</sub>CH<sub>2</sub>CH<sub>2</sub>CH<sub>2</sub>/NH-(CH<sub>2</sub>)<sub>7</sub>CH<sub>3</sub>;

-CH<sub>2</sub>CH<sub>2</sub>-NHSO/-(CH<sub>2</sub>)/CH<sub>3</sub>;

 $-CH_2CH_2-NHSO_1/(CH_2)_1/CH_3$ ;

 $-CH_2CH_2-S-(CH_2^{\downarrow})_8CH_3;$ 

-CH<sub>2</sub>CH<sub>2</sub>-S-(CH<sub>2</sub>)<sub>9</sub>CH<sub>3</sub>;

 $-CH_2CH_2-S-(CH_2)_{10}CH_3;$ 

-CH<sub>2</sub>CH<sub>2</sub>CH<sub>2</sub>-S-(CH<sub>2</sub>)<sub>8</sub>CH<sub>3</sub>

-CH<sub>2</sub>CH<sub>2</sub>CH<sub>2</sub>-S-(CH<sub>2</sub>)<sub>9</sub>CH<sub>3</sub>;

 $-CH_2CH_2CH_2-S-(CH_2)_3-CH=CH-(CH_2)_4CH_3$  (trans);

-CH<sub>2</sub>CH<sub>2</sub>CH<sub>2</sub>CH<sub>2</sub>-S-(CH<sub>2</sub>)<sub>7</sub>CH<sub>3</sub>;

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-CH<sub>2</sub>CH<sub>2</sub>-S(O)-(CH<sub>2</sub>)<sub>9</sub>CH<sub>3</sub>;
                         -CH_2CH_2-S-(CH_2)_6Ph;
                         -CH_2CH_2-S-(CH_2)_8Ph;
                         -CH_2CH_2CH_2-S-(CH_2)_8Ph;
                         -CH<sub>2</sub>CH<sub>2</sub>-NH-CH<sub>2</sub>-4-(4-Cl-Ph)-Ph;
  5
                        -CH<sub>2</sub>CH<sub>2</sub>-NH-CH<sub>2</sub>-4-[4-CH<sub>3</sub>)<sub>2</sub>CHCH<sub>2</sub>-]-Ph;
                        -CH_2CH_2-NH-CH_2-4-(4-CF_3-Ph)-Ph;
                        -CH<sub>2</sub>CH<sub>2</sub>-S-CH<sub>2</sub>-4-(4-Cl<sub>1</sub>Ph)-Ph;
                        -CH_2CH_2-S(O)-CH_2-4-(4|Cl-Ph)/Ph;
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                        -CH<sub>2</sub>CH<sub>2</sub>CH<sub>2</sub>-S-CH<sub>2</sub>-4-(4-Cl-Ph)-Ph;
                        -CH<sub>2</sub>CH<sub>2</sub>CH<sub>2</sub>-S(O)-CH<sub>2</sub>-4/(4-Cl-Ph)-Ph;
                        -CH<sub>2</sub>CH<sub>2</sub>CH<sub>2</sub>-S-CH<sub>2</sub>-4-[4,4-di-Cl-PhCH<sub>2</sub>O-)-Ph;
                        -CH<sub>2</sub>CH<sub>2</sub>-NHSO<sub>2</sub>-CH<sub>2</sub>/4 [4-Ph)-Ph]-Ph;
                       -CH<sub>2</sub>CH<sub>2</sub>-NHSO<sub>2</sub>/CH<sub>2</sub>/4/(4-Cl-Ph)-Ph;
                       -CH_2CH_2CH_2-NHSO_2-CH_2/4-(Ph-C=C-)-Ph;
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                     -CH<sub>2</sub>CH<sub>2</sub>CH<sub>2</sub>-NHSO<sub>2</sub>-4/(4-Cl-Ph)-Ph; and
                       -CH<sub>2</sub>CH<sub>2</sub>CH<sub>2</sub>-NHSO<sub>2</sub>-4-(naphth-2-yl)-Ph.
```

- 54. The pharmaceutical composition of Claim 50, wherein R<sup>3</sup> is -OH or -NR<sup>c</sup>R<sup>c</sup>.
- 55. The pharmaceutical composition of Claim 50, wherein R<sup>5</sup> is hydrogen, -CH<sub>2</sub>-N-(N-CH<sub>3</sub>-D-glucamine); -CH<sub>2</sub>-NH-CH<sub>2</sub>CH<sub>2</sub>-NH-(CH<sub>2</sub>)<sub>9</sub>CH<sub>3</sub>; -CH<sub>2</sub>-NH-CH<sub>2</sub>CH<sub>2</sub>-NH-(CH<sub>2</sub>)<sub>11</sub>CH<sub>3</sub>; -CH<sub>2</sub>-NH-(CH<sub>2</sub>)<sub>5</sub>-COOH; and -CH<sub>2</sub>-N-(2-amino-2-deoxygluconic acid).
- 56. The pharmaceutical composition of Claim 50, wherein R<sup>8</sup> is -CH<sub>2</sub>C(O)NH<sub>2</sub>, -CH<sub>2</sub>COOH, benzyl, 4 hydroxyphenyl or 3-chloro-4-hydroxyphenyl.

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- 57. The pharmaceutical composition of Claim 50, wherein R<sup>9</sup> is hydrogen and R<sup>11</sup> is hydrogen or methyl.
- 58. The pharmaceutical composition of Claim 57, wherein R<sup>10</sup> is alkyl or substituted alkyl.
- 59. The pharmaceutical composition of Claim 58, wherein  $R^{12}$  is hydrogen, alkyl, substituted alkyl or  $C(O)R^{d}$ .
  - 60. The pharmaceutical composition of Claim 50, wherein n is 1.
  - 61. A pharmaceutical composition comprising a pharmaceutically-acceptable carrier and a therapeutically effective amount of a compound of formula II:

HO 
$$R^{21}$$
  $R^{26}$   $R^{26}$   $R^{27}$   $R^{27}$   $R^{27}$   $R^{27}$   $R^{22}$   $R^{23}$   $R^{23}$   $R^{24}$   $R^{25}$   $R^{27}$   $R^{27}$ 

wherein

 $R^{21}$  is selected from the group consisting of hydrogen, alkyl, substituted alkyl, alkenyl, substituted alkenyl, alkynyl, substituted alkynyl, cycloalkyl, substituted cycloalkyl, cycloalkenyl, substituted cycloalkenyl, aryl, heteroaryl, heterocyclic and  $-R^a-Y-R^b-(Z)_x$ ; or a saccharide group optionally substituted with  $-R^a-Y-R^b-(Z)_x$ ;

 $R^{22}$  is  $-OR^c$ ,  $-NR^cR^c$ ,  $-O-R^a Y^-R^b - (Z)_x$  or  $-NR^c - R^a - Y - R^b - (Z)_x$ ;  $R^{23}$  is selected from the group consisting of hydrogen, halo,

 $-CH(R^c)-NR^cR^c$ ,  $-CH(R^c)-R^c$  and  $-CH(R^c)-NR^c-R^a-Y-R^b-(Z)_x$ ;

R<sup>24</sup> is selected from the group consisting of hydrogen and lower alkyl;

R<sup>25</sup> is selected from the group consisting of hydrogen, alkyl, substituted alkyl, alkenyl, substituted alkenyl, alkynyl, substituted alkynyl, cycloalkyl, substituted cycloalkyl, cycloalkenyl, substituted cycloalkenyl, aryl, heteroaryl and heterocyclic;

R<sup>26</sup> is selected from the group consisting of hydrogen and lower alkyl; or R<sup>25</sup> and R<sup>26</sup> are joined, together with the carbon and nitrogen atoms to which they are attached, to form a heterocyclic ring;

 $R^{27}$  is selected from the group consisting of hydrogen, alkyl, substituted alkyl, alkenyl, substituted alkynyl substituted alkynyl, cycloalkyl, substituted cycloalkyl, cycloalkenyl, substituted cycloalkenyl, aryl, heteroaryl, heterocyclic,  $-C(O)R^d$ ,  $-C(NH)R^d$ ,  $-C(O)NR^cR^c$ ,  $-C(O)OR^d$ ,  $-C(NH)NR^cR^c$  and  $-R^a-Y-R^b-(Z)_x$ , or  $R^{26}$  and  $R^{27}$  are joined, together with the nitrogen atom to which they are attached, to form a heterocyclic ring;

each R<sup>a</sup> is independently selected from the group consisting of alkylene, substituted alkylene, alkenylene, substituted alkynylene and substituted alkynylene;

each R<sup>b</sup> is independently selected from the group consisting of a covalent bond, alkylene, substituted alkylene, alkenylene, substituted alkenylene, alkynylene and substituted alkynylene, provided R<sup>b</sup> is not a covalent bond when Z is hydrogen;

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each  $R^c$  is independently selected from the group consisting of hydrogen, alkyl, substituted alkyl, alkenyl, substituted alkynyl, substituted alkynyl, cycloalkyl, substituted cycloalkyl, cycloalkenyl, substituted cycloalkenyl, aryl, heteroaryl, heterocyclic and  $-C(O)R^d$ ;

each R<sup>d</sup> is independently selected from the group consisting of alkyl, substituted alkyl, alkenyl, substituted alkynyl, substituted alkynyl, cycloalkyl, substituted cycloalkyl, cycloalkenyl, substituted cycloalkenyl, aryl, heteroaryl and heterocyclic;

Re is an aminosaccharide group;

each Y is independently selected from the group consisting of oxygen, sulfur, -S-S-,  $-NR^c-$ , -S(O)-,  $-SO_2-$ ,  $-NR^cC(O)-$ ,  $-OSO_2-$ , -OC(O)-,  $-NR^cSO_2-$ ,  $-C(O)NR^c-$ , -C(O)O-,  $-SO_2NR^c-$ ,  $-SO_2O-$ ,  $-P(O)(OR^c)O-$ ,  $-P(O)(OR^c)NR^c-$ ,  $-OP(O)(OR^c)OR^c-$ ,  $-OP(O)(OR^c)NR^c-$ , -OC(O)O-,  $-NR^cC(O)O-$ ,  $-NR^cC(O)NR^c-$ ,  $-OC(O)NR^c-$ , and  $-NR^cSO_2NR^c-$ ;

each Z is independently selected from hydrogen, aryl, cycloalkyl, cycloalkenyl, heteroaryl and heterocyclic:

n is 0, 1 or 2;

x is 1 or 2:

and pharmaceutically acceptable salts, stereoisomers and prodrugs thereof; provided that at least one of  $R^{21}$ ,  $R^{22}$ ,  $R^{23}$  or  $R^{27}$  has a substitutent of the formula  $-R^a-Y-R^b-(Z)_x$ ;

and further provided that:

- (i) when Y is -NR<sup>c</sup>, R<sup>c</sup> is alkyl of 1 to 4 carbon atoms, Z is hydrogen and R<sup>b</sup> is alkylene, then R<sup>b</sup> contains at least 5 carbon atoms;
- (ii) when Y is  $-C(O)NR^{c}$ , Z is hydrogen and  $R^{b}$  is alkylene, then  $R^{b}$  contains at least 5 carbon atoms;
- (iii) when Y is sulfur, Z is hydrogen and R<sup>b</sup> is alkylene, then R<sup>b</sup> contains at least 7 carbon atoms; and

- (iv) when Y is oxygen, Z is hydrogen and R<sup>b</sup> is alkylene, then R<sup>b</sup> contains at least 11 carbon atoms.
- 62. The pharmaceutical composition of Claim 61, wherein R<sup>21</sup> is a saccharide group of the formula:

wherein

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 $R^{15}$  is  $-R^a-Y-R^b-(Z)_x$ , and

R<sup>16</sup> is hydrogen or methyl/

63. The pharmaceutical composition of Claim 62, wherein  $R^{15}$  is a  $-R^a-Y-R^b-(Z)_x$  group selected from the group consisting of:

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$$-CH_2CH_2-NH-(CH_2)_9CH_3;$$

$$-CH_2CH_2-NHSO_2-(CH_2)_9CH_3;$$

$$-CH2CH2-S-(CH2)8CH3;$$

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-CH<sub>2</sub>CH<sub>2</sub>CH<sub>2</sub>-S-(CH<sub>2</sub>)<sub>9</sub>CH<sub>3</sub>;
                           -CH_2CH_2CH_2-S-(CH_2)_3-CH=CH-(CH_2)_4CH_3 (trans);
                          -CH_2CH_2CH_2CH_2-S-(CH_2)_7CH_3;
                          -CH<sub>2</sub>CH<sub>2</sub>-S(O)-(CH<sub>2</sub>)<sub>9</sub>CH<sub>3</sub>;
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                          -CH_2CH_2-S-(CH_2)_6Ph;
                          -CH_2CH_2-S-(CH_2)_8Ph;
                          -CH<sub>2</sub>CH<sub>2</sub>CH<sub>2</sub>-S-(CH<sub>2</sub>)<sub>8</sub>Ph;
                          -CH<sub>2</sub>CH<sub>2</sub>-NH-CH<sub>2</sub>-4-(4-Cl-Ph)-Ph;
                          -CH<sub>2</sub>CH<sub>2</sub>-NH-CH<sub>2</sub>-4-[4-CH<sub>3</sub>)<sub>2</sub>CHCH<sub>2</sub>-]-Ph;
                         -CH_{2}CH_{2}-NH-CH_{2}-4-(4-CF_{3}-Ph)-Ph;
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                         -CH<sub>2</sub>CH<sub>2</sub>-S-CH<sub>2</sub>-4-(4-Cl-Ph)-Ph;
                         -CH_2CH_2-S(O)-CH_2-4-(4-Cl_7Ph)-Ph;
                         -CH<sub>2</sub>CH<sub>2</sub>CH<sub>2</sub>-S-CH<sub>2</sub>-4-(4-Cl-Ph)-Ph;
                         -CH<sub>2</sub>CH<sub>2</sub>CH<sub>2</sub>-S(O)-CH<sub>2</sub>-4-(4-C1-Ph)-Ph;
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                         -CH<sub>2</sub>CH<sub>2</sub>CH<sub>2</sub>-S-CH<sub>2</sub>-4-[3,4-di-Cl-PhCH<sub>2</sub>O-)-Ph;
                         -CH<sub>2</sub>CH<sub>2</sub>-NHSO<sub>2</sub>-CH<sub>2</sub>-4-[4/(4-Ph)-Ph]-Ph;
                        -CH<sub>2</sub>CH<sub>2</sub>CH<sub>2</sub>-NHSO<sub>2</sub>-CH<sub>2</sub>-4-(4-Cl-Ph)-Ph;
                        -CH_{2}CH_{2}CH_{2}-NHSO_{2}-CH_{2}-4-(Ph_{7}C=C)-Ph;
                        -CH<sub>2</sub>CH<sub>2</sub>CH<sub>2</sub>-NHSO<sub>2</sub>-4/(4-Cl<sub>2</sub>Ph)-Ph; and
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                        -CH2CH2CH2-NHSO2-4 (naphth-2-yl)-Ph.
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- 64. The pharmaceutical composition of Claim 61, wherein R<sup>22</sup> is -OH or -NR<sup>c</sup>R<sup>c</sup>.
- 65. The pharmaceutical composition of Claim 61, wherein R<sup>23</sup> is hydrogen, -CH<sub>2</sub>-N-(N-CH<sub>3</sub>-D-glucamine); -CH<sub>2</sub>-NH-CH<sub>2</sub>CH<sub>2</sub>-NH-(CH<sub>2</sub>)<sub>9</sub>CH<sub>3</sub>; -CH<sub>2</sub>-NH-CH<sub>2</sub>CH<sub>2</sub>-NH-(CH<sub>2</sub>)<sub>11</sub>CH<sub>3</sub>; -CH<sub>2</sub>-NH-(CH<sub>2</sub>)<sub>5</sub>-COOH; or -CH<sub>2</sub>-N-(2-amino-2-deoxygluconic acid).

- 66. The pharmaceutical composition of Claim 61, wherein  $R^{24}$  is hydrogen and  $R^{26}$  is hydrogen or methyl.
- 67. The pharmaceutical composition of Claim 66, wherein R<sup>25</sup> is alkyl or substituted alkyl.
- 5 68. The pharmaceutical composition of Claim 67, wherein R<sup>25</sup> is isobutyl.
  - 69. The pharmaceutical composition of Claim 68, wherein  $R^{27}$  is hydrogen, alkyl, substituted alkyl or  $-C(Q)R^d$
  - 70. A pharmaceutical composition comprising a pharmaceutically-acceptable carrier and a therapeutically effective amount of a compound shown in any of Tables I, II, III, IV, V or VI, or a pharmaceutically-acceptable salt thereof.
  - 71. A method of treating a mammal having a bacterial disease, the method comprising administering to the mammal a therapeutically effective amount of a pharmaceutical composition of Claim 36, 50 or 61.